## **REMARKS**:

### **Drawing Corrections**

It is Applicant's belief that all of the corrections detailed and requested by the Examiner in the present Office Action have been previously addressed by Applicant in the prior filed Preliminary Amendment dated July 16, 2003. Nonetheless, Applicant again submits the corrected Figure 1 and Annotated Figure 1 herewith showing corrections with the present Response.

### 35 U.S.C. 103(a) Rejections

The Examiner rejected Claims 1, 4, 5, 8, 11, 12, 15 and 17-20 under 35 U.S.C. 103(a) as being unpatentable over Skalski U.S. Patent 5,035,301 and Williams et al. U.S. Patent 4,751,984. The Examiner stated that Skalski teaches in Figures 1-6, an elevator speed dictation system. The Examiner maintains that Skalski teaches an elevator and motor controlled by a profile generator (Fig. 1) to control the motor drive. The Examiner maintains that the velocity profile of Skalski can be adjusted based on a load determination and adjusts the acceleration and jerk limits. The Examiner maintains that Skalski incorporates the specification of Williams et al. that illustrates the profile generator 10 for an elevator trip that allows values greater than designed.

Notwithstanding the Examiner's reasoning noted above in rejecting the presently pending claims, Applicant notes that the claims as amended in the present application call for an optimized velocity profile without contract speed constraints. Applicant maintains that the present invention differs from those disclosed in the cited prior art references in at least this one important way. As background, contract speed is understood in the industry to normally be the maximum velocity attainable by an elevator. The term "contract speed" arises from the fact that it is the speed that typically appears in the supply contract. For example, a contract may define limitations on an elevator as having a 3500 pound capacity at 500 ft./min. This limitation means that the elevator will be designed to lift a payload of 3500 pounds at 500 ft./min.

Unlike the inventions described in the cited prior art references, the present invention does not use the contract speed as a cap or a restraint. For example, in the present invention, as described in detail in the specification, an elevator defined in a contract as having a 3500 pound capacity at 500 ft./min. will indeed lift a 3500 pound payload at 500 ft./min. However, *unlike*, the inventions of Skalski and Williams et al., the contract speed in the present invention is not a constraint – for example, the device of the present invention with the above contract speed (3500 lbs. at 500 ft./min.) may lift a 1750 pound payload at 1000 ft./min with the same motor and drive (see, e.g. paragraphs 13-15 and 28 of the present application). This flexibility is neither taught nor suggested by either Skalski or Williams.

In contrast, Skalski and Williams teach away from this concept and have velocity/acceleration profiles subject to contract speed restraints (see e.g. Skalski col. 2, lines 30 -33 and Williams Figs. 1-2; col. 1 lines 60-64 and col. 3 lines 19-24.) Examiner points to Fig. 9 of Williams as disclosing an elevator trip allowing for values greater than designed (V<sub>k</sub>). Applicant maintains that Fig 9 of Williams discloses no such arrangement but rather shows and describes certain anticipation margins or lookahead concepts not directly related to contract speed involving the stop control point and delays in response of the elevator drive to the control system (see e.g. col. 7 lines 10-60). Accordingly, for the foregoing reasons, Applicant respectfully believes the Examiner's rejections under § 103 for all pending claims are misplaced and respectfully request that they be withdrawn.

## Conclusion

Applicant has made an earnest effort to be fully responsive to the Examiner's objections and believes that Claims 1, 4, 5, 8, 11, 12, 15 and 17-20 are now in condition for allowance. The applicant solicits the allowance of these Claims.

If, however, the Examiner should for any reason consider this application not to be in condition for allowance he is respectfully requested to telephone the undersigned attorney at the number listed below for an interview or clarification prior to issuing a further Action.

Respectfully submitted,

Rory S. Smith et al.

Bv

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## **CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, this 3rd day of March 2005.

Kevin S. Sprecher

# **AMENDMENTS TO THE DRAWING:**

The attached sheet of drawings includes changes to Fig. 1. This sheet replaces the original sheet. Attached as Appendix to this paper is a Replacement Sheet as well as an Annotated Sheet Showing Changes.

Serial No. 10/621,280 Docket No. 0106162.0527285 Sheet 1 of 1 Annotated Sheet Showing Changes

